18 December 1961

Dear Milt,

The following information concerns the 13 rolls of material that are being moved into your area. Would you please
25X1A see that [redacted] receive the information.

You may recall that we were going to measure the cores both before and after spooling, use a constant tension during wind less than maximum supplied previously but hopefully enough to prevent telescoping and also attach the film to the core of some cores to shut down your system by an increase of tension at the end of the run.

Our spooling tension was 6.5 lbs. per 6.6 inch web or just about 1 lb. per inch of width at the core decreasing slightly as the roll is spooled under constant torque.

Each core has been numbered, the first nine numbers listed below are the unmodified cores and the last four are of the lighter weight modified type. The four lightweight cores, numbers 20 through 23 have the film attached to itself at the core end. All 4 have been attached in the same way.

The position of measurement has been marked by a "dot" or a line on the outside of each flange. Core #19 was measured after spooling to see if this affected size. Our readings were as follows on next page:

OIC

	Before Spooling		After Spooling		Differences				Smallest Dia. found
Core	Dot_{Db}	$Line_{Lb}$	Dot_{Da}	$Line_{La}$	D_b	D_a	L_b	L_a	S_a
10	5.0625	5.0630	5.0590	5.0625	.0035	.0005			5.0585
15	.0615	.0610	.0582	.0615	.0033	+.0005			.0582
12	.0625	.0620	.0615	.0600	.0010	.0020			.0595
9	.0620	.0625	.0605	.0610	.0015	.0015			.0590
13	.0645	.0640	.0632	.0623	.0013	.0017			---
19	.0615	.0615	.0593	.0615	.0022	.0000			.0593
	16 hrs. later		.0585	.0610	.0030	.0005			.0590
	79 hrs. later		.0585	.0618	.0030	+.0003			.0585
16	.0620	.0620	.0625	.0600	+.0005	.0020			.0590
17	.0620	.0625	.0605	.0610	.0015	.0015			.0605
18	.0615	.0620	.0610	.0615	.0005	.0005			.0589
20	.0653	.0653	.0638	.0610	.0015	.0043			.0610
21	.0640	.0659	.0605	.0645	.0035	.0014			.0603
22	.0650	.0647	.0615	.0640	.0035	.0007			.0605
23	.0653	.0646	.0638	.0603	.0015	.0043			.0600

All rolls were spooled with an expanding mandrel holding core diameter constant until released from mandrel after spooling.

Film spooled and measurements taken in an area of 72° - 50% RH.

About the only conclusions I can reach after looking over these data are rather self evident ie.

1) Lowering tension of spooling doesn't help appreciably.
2) Holding core at a constant size during spooling still causes some "collapse" after removal from mandrel.
3) Further aging may further "collapse" core.

Please keep us informed concerning the outcome of your tests or any decision you may arrive at concerning a change in your mandrel. We need some sort of a specification concerning future rolls if we are to maintain your latest schedule of requirements.

Sincerely,

J. A. O.

JAO/KL
cc: CFH
ELG